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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/852,611	05/09/2001	Jerold Shan	HP-10007924	4891

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HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P.O. Box 272400
Fort Collins, CO 80527-2400

EXAMINER

HEWITT II, CALVIN L

ART UNIT	PAPER NUMBER
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3621

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/04/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

09/852,611

Applicant(s)

SHAN ET AL.

Examiner

Calvin L. Hewitt II

Art Unit

3621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 December 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4,6-10,13 and 15-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 4, 6-10, 13, and 15-41 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Status of Claims

1. Claims 1, 4, 6-10, 13, and 15-41 have been examined.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 1, 4, 6-10, 13, 15-18 and 20-41 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claim 1 is directed to an algorithm. Specifically, claim 1 is directed to a mathematical model and "using the model *to target* delivery of *future* promotions" (emphasis added). It has been held that in order for an algorithm to be statutory it must product a "useful, concrete and tangible result" (*State Street Bank & Trust Co. v. Signature Financial Group Inc.*, 47 USPQ2d 1596 (Fed. Cir. 1998); *AT&T Corp. v. Excel Communications, Inc.*, 50 USPQ2d 1447 (Fed. Cir.1999)). The result of Applicant's method, however, is at least not tangible as it is directed to a future action (i.e. targeted delivery of advertisements) that will not necessarily occur (i.e. future promotions). Further, the mere description or name of the model ("for simulating shopping behavior as a function of the customer profile

information and the promotion attributes") does not automatically convey utility.

Therefore, claim 1 is non-statutory as it does not produce a useful, concrete and tangible result. Claims 10 and 35 are also rejected as each recites similar language to claim 1.

Claims 1, 4, 6-9, 13, 15-18, 20-34 and 36-41 are also rejected as each depends from either claim 1, 10 or 35.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 6, 15, 21 and 29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 6 and 15 recite "wherein the model is partially based on traditional logistical regression theory and partially based on the maximum utility theory", however, Applicant has not provided one of ordinary skill with a specific methodology for combining the two theories for producing the model.

The term "partially" in claim 6 is a relative term which renders the claim indefinite. The term "partially" is not defined by the claim, the specification does

not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

Claim 15 is also rejected as it recites similar language.

Claim 21 recites the limitation "the shopping behavior" in line 3. There is insufficient antecedent basis for this limitation in the claim. Claim 29 is also rejected as it recites similar language.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1, 10, 19-25, 27-33 and 35-40 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Gerace, U.S. Patent No. 5,848,396.

As per claims 1, 10, 19-25, 27-33 and 35-40, Gerace teaches a method for targeting ads to a user comprising:

- storing customer profile information (abstract; figures 3B-D; column/line 4/56-5/15; column/line 5/54-6/40)

- storing customer web log information (abstract; figures 3F-G; column 5, lines 26-40; column/line 6/40-7/24)
- storing promotion attributes (abstract; figures 5A-D; column 5, lines 15-40)
- inputting profile, web log and promotion attributes into a model (abstract; column 2, lines 10-23 and 35-53; column 13, lines 1-26; column 15, lines 25-44; column 18, lines 10-26; column/line 18/51-19/33) for automatically targeting sales promotions to a customer (abstract; column 1, lines 5-14; column 2, lines 1-65; column 9, lines 8-30; column 13, lines 22-26; column 22, lines 53-65; column/line 26/48-27/50; column/line 28/10-29/20)
- simulating conversion of a shopper into a buyer (column 2, lines 35-53; column 13, lines 1-26; column 18, lines 10-25), varying a promotion based on the model and observing the results (column 1, lines 5-13; column 2, lines 10-23 and 35-53; column 5, lines 8-26; column 7, lines 23-38; column 18, lines 10-25) and continuously updating the model (abstract; column 2, lines 10-23 and 35-53; column 15, lines 25-44; column 18, lines 10-26; column/line 18/51-19/33)

Regarding the calculating a percentage likelihood that a customer will become a purchaser, Gerace teaches using input such as buyer purchases (column 2, lines

35-42; column 9, lines 8-15; column 13, lines 1-32) to adjust how ads are displayed to customers (column 18, lines 10-25). Therefore, as some customers are excluded from the population of customers who are to view ads (column 18, lines 18-26) the system of Gerace necessarily calculates a percentage likelihood that one customer is more likely to make a purchase over another.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 4, 6-9, 13, 15-18, 26, 34 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gerace, U.S. Patent No. 5,848,396.

As per claims 4, 6, 13, 15, 26, 34 and 41, Gerace teaches using a regression analysis to match advertisements to customers (abstract; column 2, lines 10-23 and 35-53; column 15, lines 25-44; column 18, lines 10-26; column/line 18/51-19/33). Regression (e.g. linear, non-linear, logarithmic) and decision modeling (e.g. utility functions) are well-known methods for analyzing data. Therefore, it would have been obvious to one of ordinary skill to use

whatever form of analysis he/she is most comfortable with and/or produces the best results (*In re Wolfe*, 116 USPQ 443, 444 (CCPA 1961)).

As per claims 7-9 and 16-18, Gerace teaches using profile, web log and promotion attributes to better target ads (abstract; figures 3A-G and 5A-D; column/line 4/56-7/24). Therefore, it would have been obvious to one of ordinary skill to collect whatever customer, customer internet history, or advertisement data necessary in order to more effectively target ads to customers (*In re Wolfe*, 116 USPQ 443, 444 (CCPA 1961)).

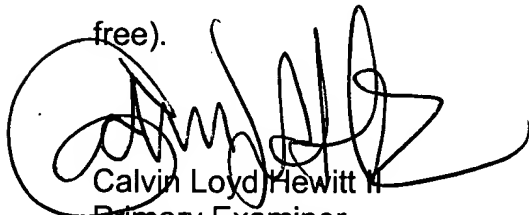
Conclusion

10. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Calvin Loyd Hewitt II whose telephone number is (571) 272-6709. The Examiner can normally be reached on Monday-Friday from 8:30 AM-5:00 PM.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Andrew Fischer, can be reached at (571) 272-6779.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public

PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Calvin Loyd Hewitt II
Primary Examiner

March 23, 2007